

Mr Carter
Welwyn-Hatfield District Council
Development Control
The Campus
Welwyn Garden City
Hertfordshire
AL8 6AE

Our ref: NE/2018/128222/01-L01
Your ref: 6/2018/0171/MAJ
Date: 13 March 2018

Dear Mr Carter

Creation of a mixed-use quarter comprising the erection of up to 1,340 residential dwellings including 414 (31%) affordable dwellings (use class c3); 114 extra care homes (use class c2); the erection of a civic building comprising 494 sq.m of health (use class d1), 494 sq.m of community use (use class d1), 1,232 sq.m of office (use class b1) and 646 sq.m of retail (class a1/a2/a3/a4/a5); alterations, additions and change of use of grade ii listed building and retained silos to provide 5,096 sq.m of flexible business floorspace (use class b1), 265 sq.m combined heat and power (sui generis), 2,494 sq.m international art centre (use class d1), 1,226 sq.m gymnasium (use class d2), 1,576 sq.m of restaurant/coffee shop/bar (use class a1/a3/a4/a5), creche/day nursery of 644 sq.m as well as a network rail toc building of 364 sq.m; plus associated car parking, access, landscaping, public art and other supporting infrastructure.

Former Shredded Wheat Factory, Welwyn Garden City, Hertfordshire, AL8 6UN.

Thank you for consulting us on the above application. The proposed development will be acceptable subject to the following planning conditions. Without these conditions we would object to the proposal in line with paragraph 109 of the National Planning Policy Framework (NPPF) because it cannot be guaranteed that the development will not be put at unacceptable risk from, or be adversely affected by, unacceptable levels of water pollution.

The previous use of the proposed development site as for a number of industrial activities presents a high risk of contamination that could be mobilised during construction to pollute controlled waters. Controlled waters are particularly sensitive in this location because the proposed development site:

- is within 3 Source Protection Zones (SPZ) 3 for the Middlesfield Road, St Catherine's Road and Essex Road potable abstraction.
- is located upon Principal aquifer within the Lewes Nodular Formation and the Seaford Chalk formation.

The submitted report "*Plutus Estates (WGC) Limited and Metropolitan Housing Trust Former Shredded Wheat Factory, Welwyn Garden City Environmental Statement: Volume 1, Main Text (entram, 12th of Feb 2018)*" provides us with confidence that it will be possible to suitably manage the risk posed to controlled waters by this development.

Cont/d..

Further detailed information will however be required before the development commences. It is our opinion that it would place an unreasonable burden on the developer to ask for more detailed information prior to the granting of planning permission but respect that this is a decision for the Local Planning Authority (LPA).

Condition 1 – Site investigation and Remediation Strategy

No development approved by this planning permission shall commence until a site investigation and remediation strategy to deal with the risks associated with contamination of the site has been submitted to, and approved in writing by, the LPA.

This strategy will include the following components:

1. A preliminary risk assessment which has identified:
 - a. All previous uses;
 - b. Potential contaminants associated with those uses;
 - c. A conceptual model of the site indicating sources, pathways and receptors;and
- d. Potentially unacceptable risks arising from contamination at the site.
2. A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.
3. The results of the site investigation and the detailed risk assessment referred to in (2) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.
4. A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (3) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

Reason

The Thames river basin management plan requires the restoration and enhancement of water bodies to prevent deterioration and promote recovery of water bodies. Without this condition, the impact of contamination present could result in deterioration of groundwater quality within the Upper Lee Chalk WFD groundwater body. This is also in line with policy R2 and R7 of the Welwyn and Hatfield Local Plan.

Condition 2 – Verification Report

Prior to each phase of development being occupied/ brought into use a verification report demonstrating the completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to, and approved in writing, by the LPA. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met.

Reasons

To ensure that the site does not pose any further risk to the water environment by demonstrating that the requirements of the approved verification plan have been met and that remediation of the site is complete, in line with paragraph 109 of the NPPF. This is also in line with policy R2 and R7 of the Welwyn and Hatfield Local Plan.

Condition 3 – Long Term Monitoring

The development hereby permitted may not commence until a monitoring and maintenance plan in respect of contamination, including a timetable of monitoring and submission of report has been submitted to, and approved in writing by, the LPA. Reports as specified in the approved plan, including details of any necessary

contingency action arising from the monitoring, shall be submitted to, and approved in writing by, the LPA.

Reasons

To ensure that the site does not pose any further risk to the water environment by managing any ongoing contamination issues and completing all necessary long-term remediation measures, in line with paragraph 109 of the NPPF. This is also in line with policy R2 and R7 of the Welwyn and Hatfield Local Plan.

Condition 4 - Previously Unidentified Contamination

If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the LPA) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to and approved in writing by the LPA. The remediation strategy shall be implemented as approved.

Reasons

To ensure that the development is not put at unacceptable risk from, or adversely affected by, unacceptable levels water pollution from previously unidentified contamination sources at the development site, in line with paragraph 109 of NPPF. This is also in line with policy R2 and R7 of the Welwyn and Hatfield Local Plan.

Condition 5 – SUDs infiltration of surface water into ground

No infiltration of surface water drainage into the ground at the former Shredded Wheat factory is permitted other than with the express written consent of the local planning authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to controlled waters. The development shall be carried out in accordance with the approval details.

Reasons

To ensure that the development is not put at unacceptable risk from, or adversely affected by, unacceptable levels water pollution caused by mobilised contaminants in line with paragraph 109 of the NPPF. This is also in line with policy R2 and R7 of the Welwyn and Hatfield Local Plan.

Condition 6 - Piling / boreholes /tunnel shafts / ground source heating and cooling systems – details to be agreed

Piling, investigation boreholes, tunnel shafts and ground source heating and cooling systems using penetrative methods shall not be carried out other than with the written consent of the LPA. The development shall be carried out in accordance with the approved details.

Reason

To ensure that the proposed deep intrusive ground works does not harm groundwater resources, in line with paragraph 109 of the NPPF. This is also in line with policy R2 and R7 of the Welwyn and Hatfield Local Plan.

Condition 7 - Decommission of investigative boreholes

A scheme for managing any borehole installed for the investigation of soils, groundwater or geotechnical purposes shall be submitted to and approved in writing by the LPA. The scheme shall provide details of how redundant boreholes are to be decommissioned and how any boreholes that need to be retained, post-development, for monitoring purposes will be secured, protected and inspected. The scheme as

approved shall be implemented prior to the occupation of each phase of development.

Reason

The Thames river basin management plan requires the restoration and enhancement of water bodies to prevent deterioration and promote recovery of water bodies. Without this condition, the impact of contamination by various organic chemicals which are highly likely to be present within the soil and groundwater beneath the site could result in the deterioration of the chemical status of the groundwater within the Upper Lee Chalk WFD groundwater body. It is also to ensure that redundant boreholes are safe and secure, and do not cause groundwater pollution or loss of water supplies, in line with paragraph 109 of the NPPF. This is also in line with policy R2 and R7 of the Welwyn and Hatfield Local Plan.

Advice to Applicant

Site investigation and Remediation

The submitted Entram Environmental Statement has identified that the site has been subject to contamination caused by the historic uses. It makes a series of recommendations for further site investigation to establish the current baseline conditions, along with an assessment of the risks posed and the identification of any remedial activities required, which the Environment Agency is in general agreement with.

Any changes to these components require the written consent of the LPA. The scheme shall be implemented as approved. The remediation strategy should be carried out by a competent person in line with paragraph 121 of the NPPF. The Planning Practice Guidance defines a "Competent Person (to prepare site investigation information): A person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation." (<http://planningguidance.planningportal.gov.uk/blog/policy/achieving-sustainable-development/annex-2-glossary/>).

SUDs

In certain conditions, the discharge of anything other than clean roof water to ground may require an environmental permit.

Where SUDs are proposed; infiltration SUDs should not be located in unsuitable and unstable ground conditions such as land affected by contamination or solution features. Where infiltration SuDS are to be used for surface run-off from roads, car parking and public or amenity areas, they should have a suitable series of treatment steps to prevent the pollution of groundwater. For the immediate drainage catchment areas used for handling and storage of chemicals and fuel, handling and storage of waste and lorry, bus and coach parking or turning areas, infiltration SuDS are not permitted without an environmental permit. Further advice is available in the updated CIRIA SUDs manual http://www.ciria.org/Resources/Free_publications/SuDS_manual_C753.aspx

Decommission of investigative boreholes

The submitted planning application indicates that boreholes will need to be installed at the development site to investigate groundwater resources. If these boreholes are not decommissioned correctly they can provide preferential pathways for contaminant movement which poses a risk to groundwater quality. Groundwater is particularly sensitive in this location because the proposed development site is within Source Protection Zone 3.

Piling

Some piling techniques can cause preferential pathways for contaminants to migrate to groundwater and cause pollution. A piling risk assessment and appropriate mitigation measures should be submitted with consideration of the EA guidance. During piling works (especially if the piles extend to the Chalk within SPZ1 saturated zone) due to the proximity of nearby potable abstractions the weekly groundwater monitoring for insitu parameters and turbidity should be considered. <http://webarchive.nationalarchives.gov.uk/20140328084622/http://cdn.environment-agency.gov.uk/scho0202bisw-e-e.pdf>

Best Practice

Follow the risk management framework provided in CLR11, Model Procedures for the Management of Land Contamination, when dealing with land affected by contamination. Refer to the [Environment Agency Guiding principles for land contamination](#) for the type of information that we required in order to assess risks to controlled waters from the site. The Local Authority can advise on risk to other receptors, such as human health. Consider using the [National Quality Mark Scheme for Land Contamination Management](#) which involves the use of competent persons to ensure that land contamination risks are appropriately managed.

Refer to the [contaminated land](#) pages on GOV.UK for more information.

4) We expect the site investigations to be carried out in accordance with best practice guidance for site investigations on land affected by land contamination.

E.g. British Standards when investigating potentially contaminated sites and groundwater, and references with these documents:

- BS5930:2015 Code of practice for site investigations;
- BS 10175:2011+A1:2013 Code of practice for investigation of potentially contaminated sites;
- BS ISO 5667-22:2010 Water quality. Sampling. Guidance on the design and installation of groundwater monitoring points;
- BS ISO 5667-11:2009 Water quality. Sampling. Guidance on sampling of groundwaters (A minimum of 3 groundwater monitoring boreholes are required to establish the groundwater levels, flow patterns and groundwater quality.)
- Use MCERTS accredited methods for testing contaminated soils at the site. A Detailed Quantitative Risk Assessment (DQRA) for controlled waters using the results of the site investigations with consideration of the hydrogeology of the site and the degree of any existing groundwater and surface water pollution should be carried out. This increased provision of information by the applicant reflects the potentially greater risk to the water environment. The DQRA report should be prepared by a "Competent person" E.g. a suitably qualified hydrogeologist. In the absence of any applicable on-site data, a range of values should be used to calculate the sensitivity of the input parameter on the outcome of the risk assessment.
- GP3 version 1.1 August 2013 provided further guidance on setting compliance points in DQRAs.
- Where groundwater has been impacted by contamination on site, the default compliance point for both Principal and Secondary aquifers is 50m. Where leaching tests are used it is strongly recommended that BS ISO 18772:2008 is followed as a logical process to aid the selection and justification of appropriate tests based on a conceptual understanding of soil and contaminant properties, likely and worst-case exposure conditions, leaching

mechanisms, and study objectives. During risk assessment one should characterise the leaching behaviour of contaminated soils using an appropriate suite of tests. As a minimum these tests should be:

- upflow percolation column test, run to LS 2 – to derive kappa values;
- pH dependence test if pH shifts are realistically predicted with regard to soil properties and exposure scenario; and
- LS 2 batch test – to benchmark results of a simple compliance test against the final step of the column test.
- Following the DQRA, a Remediation Options Appraisal to determine the Remediation Strategy in accordance with CRL11.
- The verification plan should include proposals for a groundwater-monitoring programme to encompass regular monitoring for a period before, during and after ground works. E.g. monthly monitoring before, during and for at least the first quarter after completion of ground works, and then quarterly for the remaining 9-month period).

Should you have any queries regarding this response, please contact me.

Yours sincerely

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